

**ABSTRACT**

In a sampling block 40a-1, an intermediate frequency signal RIFs is sampled at a frequency of the intermediate frequency signal RIFs multiplied by " $1/(m+0.25)$ " or " $1/(m+0.75)$ " ( $m$ : 0 or natural number), to  
 5 generate signals having phase differences " $0$ ", " $\pi/2$ ", " $\pi$ ", and " $3\pi/2$ ". A polarity adjustment block 40a-2 matches a polarity of the signal having phase difference " $\pi$ " with that of the signal having phase difference " $0$ ". Further, it matches a polarity of the signal having phase difference  
 10 " $3\pi/2$ " with that of the signal having phase difference " $\pi/2$ ". In a signal synthesis block 40a-3, the signal with phase difference " $0$ " and the signal with phase difference " $\pi$ " having phase difference " $\pi$ " from each other are synthesized and held to be output as a demodulated signal PI. Further, the signal with phase difference " $\pi/2$ " and the signal with phase difference " $3\pi/2$ " having phase difference " $\pi$ " from each other are  
 15 synthesized and held to be output as a demodulated signal PQ. It is possible to provide a demodulation circuit and a receiving set that can easily obtain a good demodulated signal by a simple configuration.